if you like, an increase of the circulating medium of exchange tends to raise general prices. All the arguments from the recent rapid increase of our circulation are inconclusive against such a proposition; for the statistics of production, consumption, and, best of all, exchange, prove that all else has not remained the same, that the demand for a medium of exchange has grown more rapidly than has the amount of the currency. The other arguments, from the vast amounts of credit currency, are equally invalid, and for three reasons. They vastly overrate the relative amount of the credit currency; for while they assume that it is about nine times as great as the cash, it in reality is about equal in amount. They assume that a continuous refinement of banking methods is permitting a greater and greater structure of credit to be built upon a given amount of cash; whereas statistical comparison shows that there has been no appreciable gain of this sort in Anglo-Saxon lands for about a quarter of a century. They make the most serious error of all in regarding bank credits as an independent medium of exchange; whereas the amount of cash in the country is one of the two important determinants of the amount or range of credit. In other words the range of bank credits, or the amount of the credit currency, is a function of two variables. It depends not only upon the condition of the commercial world as regards confidence and enterprise, but also upon the cash reserves of the banks, and these in turn, *cæteris paribus*, depend upon the total active circulation. A careful elaboration and organization of these facts and principles will result in a quantity theory which is not yet seriously affected by any adverse criticism, and which is essentially the old classical theory of Locke, Hume, Smith, Ricardo, and all the rest. It does not mean that an increase in the currency will tend to raise general prices in exactly the same degree; but it does assert most emphatically that an addition to the currency will tend to raise general prices in some degree.

WILLARD FISHER.

A History of Money and Prices, being an Inquiry into their Relations from the Thirteenth Century to the Present Time. By J. SCHOENHOF. New York: G. P. Putnam's Sons, 1896. 12mo. pp. 352.

MR. SCHOENHOF'S book is, as the sub-title indicates, an historical criticism of the quantity theory of the value of money. It includes

three parts: A Critical Review of Price Theories and Monetary Conditions, The History of Prices from the Middle Ages to the Present Time, and The True Price-Making Factors. In the first part Mr. Schoenhof argues against the quantity theory on *a priori* grounds; in the second part he seeks to prove, by a reference to historical facts, that it cannot be valid; and in the third part he gives his own views as to the determination of prices.

There are several pleasant things to be said of the work. It gives a great number of interesting and valuable facts. There are some curious but inarticulate statements in regard to the very earliest uses of credit instruments. There are descriptions of the early coinage of France, Germany, and England, and information as to the early temporary and local variations of the ratio of gold to silver. And the third part is full of valuable data touching the recent betterments in the agencies of manufacturing and transportation.

But, notwithstanding the author's confident claim, the book will, in my opinion, never pass as a refutation of the quantity theory. Indeed, it contains no historical argument, and few of any other sort, at all disturbing to those who believe that the old quantity theory is sound. Mr. Schoenhof is another who misunderstands the theory which he is attacking, and who, therefore, directs his discussion awrong. When the quantity theory is presented as an explanation of the price of commodities, it affirms that *general* prices will, *cæteris paribus*, vary with the amount of money in active circulation; and a writer who seeks to disprove the theory must meet just that proposition. But Mr. Schoenhof formally abjures the whole scheme of general prices (p. 8 *et seq.*), and constantly treats of the prices of single articles or of classes of similar articles. Of course, this fact alone is sufficient to invalidate the whole argument. It is easy enough to show, as our author so frequently does, that there were special conditions of supply or demand at the times when marked changes in the prices of grains, or meats, appear. But this is no evidence against a theory of general prices. It is extremely interesting to note in passing that Mr. Schoenhof rejects the scheme of general prices and index numbers as unreliable and misleading because "they are not analyzed so that the parts may be given their proper representation in the totals, or that an article of minor utility may be reduced to its proper position in the expense budget of the individual or the nation." But Mr. Palgrave's tables, and those of the Aldrich Report in our own country,

are not open to this objection, nor are the tables based upon the data of the French Commission Permanente des Valeurs. Yet these "weighted averages" tell much the same story as the simple average.

Again, Mr. Schoenhof seems to think that a fall of prices coincident with an absolute increase of the volume of the currency is evidence against the quantity theory. But it certainly is not; and so, for this second reason, nearly all of Part 2 falls harmless to the ground. The quantity theory teaches us to look for a fall of prices in the train of an increased currency, if at the same time the amount of trade grows more rapidly than the volume of the circulating medium.

So some of our author's facts, so far as they are not invalidated by the considerations already suggested, make against rather than for his thesis. He finds that after a marked rise of many prices, there came a reaction at about the beginning of the last century, when British commerce was expanding, and when money was becoming more abundant. But the industrial awakening which came early in the eighteenth century did increase the demand for money; and, as we cannot accurately measure either the demand or the supply in those days, we certainly cannot refute the quantity theory by showing that the rise of many prices was checked when the absolute amount of cash was increasing.

Again, it is to be regretted that more attention is not given to the recent history of money and prices, and less to the earlier centuries. The works of Professor Thorold Rogers, upon which Mr. Schoenhof mainly relies, are as trustworthy as are to be had for those early times, but even they do not give as full data as can be found for almost any of the countries in the last half century.

It is in the third part, where are found so many interesting statements about the recent industrial improvements, that one is most likely to admit the force of the writer's argument. Nobody will deny that almost every industrial process is now much easier than it was a quarter of a century ago. And is not this sufficient explanation of the fall of prices? and, therefore, sufficient refutation of the assertion that prices have fallen because of a scarcity of money?

It is surprising that any man who understands the quantity theory should seek argument against it in the records of recent industrial progress. Betterments in industrial methods, shorter and easier ways of manufacturing and transporting, will cause a fall of prices, it is true, but only provided the greater supply of commodities which they bring for-

ward is not matched by a greater supply of money. Prices have fallen of late because the amount of money has not increased so rapidly as have the amounts of goods. If the production of money had increased so that the supply had kept pace with the demand, prices would never have fallen. That is, prices fell since 1873, not because there were industrial improvements, but because the influences of these improvements did not extend to money as well as to goods. It may be that social justice is best served by limiting the increase of the currency in such times as we have just passed through — that is another question. But certainly, the fact that prices have fallen under the peculiar circumstances which have prevailed since 1871, is not even evidence against the classical quantity theory.

W. F.

A Scientific Solution of the Money Question. By ARTHUR KITSON. Boston: Arena Publishing Co., 1895. 12mo. pp. 418.

MR. KITSON'S book is much more than a discussion of money. It is a violent and confident attack upon the whole science of economics. Not only the fundamental principles of political economy but its spirit and methods as well are most emphatically denounced as unscientific and vicious. Mr. Kitson makes much of this charge that the present economics is unscientific, and he returns again and again to the attack. He repeatedly asserts that economic conduct must always be moral, and he finds it a great fault of the orthodox economics that the conduct which it describes is at times immoral, and results in social ill. But this implies a misapprehension as to the nature of science. Economics aims to tell us, in the form of general propositions, what men do about wealth, whether their conduct is moral, immoral or indifferent. It is no more logical or just to hold economists to account for the immoral conduct which they describe than it would be to blame scientific pathologists for the sad results of the morbid processes of which they treat.

It is not easy to assign just the proper proportions of praise and blame to Mr. Kitson for his specific teachings. That he is perfectly honest and very much in earnest is certain. But an untrained man of becoming modesty should hesitate to denounce as worthless those principles of social science which have been worked out by combined efforts of scores of master minds. Yet the accepted beliefs as to the factors and processes of production and as to the laws of value are lightly